

WHAT IS CLAIMED IS:

1. A picture reading device, comprising:
  - a light irradiating unit adapted to irradiate a surface of an object to be read with light;
  - 5 a reading unit adapted to read an irradiated region irradiated by the light irradiating unit on the surface of the object to be read as a picture; and
  - an arithmetically calculating unit adapted to
  - 10 arithmetically calculate information related to the object to be read on the basis of a read result of the reading unit,
  - wherein the light irradiating unit and the reading unit are arranged in such a manner that a
  - 15 line resulting from projecting a line connecting the light irradiating unit and the reading unit on a conveyance surface of the object to be read is oblique to a conveying direction on the conveyance surface of the object to be read.
  - 20
2. A picture reading device according to claim 1, wherein the projected line is oblique to the conveying direction with about 45 degrees.
- 25 3. A picture reading device according to claim 1, wherein the reading unit comprises one of a CMOS sensor and a CCD sensor each having a plurality of

pixels, and the reading unit reads the surface of the object to be read as a two-dimensional image.

4. An image forming apparatus, comprising:
  - 5 a light irradiating unit adapted to irradiate a surface of a recording material with light;  
a reading unit adapted to read an irradiated region irradiated by the light irradiating unit on a surface of the recording material to be read as a  
10 picture; and  
an arithmetically calculating unit adapted to arithmetically calculate information related to the recording material on the basis of a read result of the reading unit,  
15 wherein the light irradiating unit and the reading unit are arranged in such a manner that a line resulting from projecting a line connecting the light irradiating unit and the reading unit on a conveyance surface of the recording material is  
20 oblique to a conveying direction on the conveyance surface of the recording material.

5. An image forming apparatus according to claim 4, wherein the projected line is oblique to the  
25 conveying direction with about 45 degrees.

6. An image forming apparatus according to

claim 4, wherein the reading unit comprises one of a  
CMOS sensor and a CCD sensor each comprising a  
plurality of pixels, and the reading unit reads the  
surface of the recording material as a two-  
5 dimensional image.

7. An image forming apparatus according to  
claim 4, further comprising a control unit adapted to  
control an image formation condition on the basis of  
10 the arithmetic operation results of the  
arithmetically operating unit.

8. An image forming apparatus according to  
claim 7, wherein the arithmetically operating unit  
15 arithmetically operates information related to a  
flatness on a surface of the recording medium.

9. An image forming apparatus according to  
claim 8, wherein the arithmetically operating unit  
20 arithmetically operates both of the size of the  
concave and convex portions and the width of the  
concave and convex portions on the recording medium.